In the Claims:

1. (Currently Amended) A method for dynamically determining a lock ~~mode~~ form in a multiprocessor, comprising:

(a) maintaining first and second system-wide measures of read and write acquisitions; and

(b) determining a lock ~~mode~~ form based upon at least some of said measures.

2. (Currently Amended) The method of claim 1, wherein said lock ~~mode~~ form is selected from the group consisting of: a distributed reader-writer lock ~~mode~~, a centralized reader-writer lock ~~mode~~, and an exclusive lock ~~mode~~.

3. (Currently Amended) The method of claim 2, wherein said exclusive lock ~~mode~~ form is selected from the group consisting of: a test and set lock ~~mode~~, a test and test and set lock ~~mode~~, a queued lock ~~mode~~, a ticket lock ~~mode~~, and a quad-aware lock ~~mode~~.

4. (Currently Amended) The method of claim 1, further comprising switching to the lock ~~mode~~ form from another lock ~~mode~~ form.

5. (Currently Amended) The method of claim 1, wherein the lock ~~mode~~ form is a distributed reader-writer lock ~~mode~~, and wherein said determining step is responsive to the system-wide measure of write acquisitions and the system-wide measure of read acquisitions.

6. (Original) The method of claim 5, wherein said determining step is further responsive to a quantity of units in the system.

7. (Original) The method of claim 6, wherein said unit is selected from a group consisting of: a CPU, a thread, a processor, a transaction, a co-routine, a thread in a multi-

threaded architecture, a NUMA module, and a task.

8. (Currently Amended) The method of claim 1, wherein the lock ~~mode~~ form is a centralized lock ~~mode~~, and wherein said determining step is responsive to the system-wide measure of write acquisitions and the system-wide measure of read acquisitions.

9. (Original) The method of claim 1, further comprising maintaining a system-wide measure of read-hold duration.

10. (Original) The method of claim 9, wherein the step of maintaining a system-wide measure of read-hold duration includes maintaining a measure of read-hold duration by a unit.

11. (Original) The method of claim 10, wherein said unit is selected from a group consisting of: a CPU, a thread, a processor, a transaction, a co-routine, a thread in a multi-threaded architecture, a NUMA module, and a task.

12. (Currently Amended) The method of claim 9, wherein the lock ~~mode~~ form is a centralized lock ~~mode~~, and wherein said determining step is responsive to the system-wide measures of read acquisitions and read-hold duration.

13. (Currently Amended) The method of claim 9, wherein the lock ~~mode~~ form is an exclusive lock ~~mode~~ and wherein said determining step is responsive to the system-wide measure of read-hold duration.

14. (Original) The method of claim 13, wherein said determining step is further responsive to the system-wide measure of read acquisitions.

15. (Original) The method of claim 1, further comprising periodically updating at least some of said system-wide measures.

16. (Original) The method of claim 1, wherein at least some of said second system-wide measures are selected from a group consisting of: a digital filter, a weighted average, a sliding window average, a finite impulse response, and a central data structure.

17. (Currently Amended) A computer system comprising:

multiple processors;

first and second system-wide measures of read and write acquisitions of said processors; and

a lock ~~mode~~ manager adapted to select a lock ~~mode~~ form responsive to at least some of said measures.

18. (Currently Amended) The system of claim 17, wherein said lock ~~mode~~ form is selected from a group consisting of: a distributed reader-writer lock ~~mode~~, a centralized reader-writer lock ~~mode~~, and an exclusive lock ~~mode~~.

19. (Currently Amended) The system of claim 18, wherein said exclusive lock ~~mode~~ form is selected from a group consisting of: a test and set lock ~~mode~~, a test and test and set lock ~~mode~~, a queued lock mode, a ticket lock ~~mode~~, and a quad-aware lock ~~mode~~.

20. (Currently Amended) The system of claim 17, wherein the lock ~~mode~~ form is a distributed reader-writer lock ~~mode~~, and wherein said lock ~~mode~~ manager is responsive to the system-wide measure of write acquisitions and the system wide measure of read acquisitions.

21. (Currently Amended) The system of claim 17, wherein the lock ~~mode~~ form is a centralized lock ~~mode~~, and wherein said lock ~~mode~~ manager is responsive to the system-wide measure of write acquisitions and the system-wide measure of read acquisitions.

22. (Currently Amended) The system of claim 17, wherein the lock ~~mode~~ form is a centralized lock ~~mode~~, and wherein said lock ~~mode~~ manager is responsive to the system-wide measure of read acquisitions and a system-wide measure of read-hold duration.

23. (Currently Amended) The system of claim 17, wherein the lock ~~mode~~ form is an exclusive lock ~~mode~~ and wherein said lock ~~mode~~ manager is responsive to a system-wide measure of read-hold duration.

24. (Currently Amended) In a multiprocessor system, an article comprising:

a computer-readable signal bearing medium;

means in the medium for maintaining first and second system-wide measures of read and write acquisitions; and

means in the medium for selecting a lock ~~mode~~ form responsive to at least some of said measures.

25. (Original) The article of claim 24, wherein the medium is selected from a group consisting of: a recordable data storage medium, and a modulated carrier signal.

26. (Currently Amended) The article of claim 24, wherein said lock ~~mode~~ form is selected from a group consisting of: a distributed reader-writer lock ~~mode~~, a centralized reader-writer lock ~~mode~~, and an exclusive lock ~~mode~~.

27. (Currently Amended) The article of claim 24, wherein the lock ~~mode~~ form is a distributed reader-writer lock mode, and wherein said means in the medium for selecting a lock ~~mode~~ form is responsive to the system-wide measure of writer acquisitions and the system wide measure of read-acquisitions.

28. (Currently Amended) The article of claim 24, wherein the lock ~~mode~~ form is a centralized lock ~~mode~~, and wherein said means in the medium for selecting a lock ~~mode~~

is response to the system-wide measure of write acquisitions and the system-wide measure of read acquisitions.

29. (Currently Amended) The article of claim 24, wherein the lock ~~mode~~ form is a centralized lock ~~mode~~, and wherein said means in the medium for selecting a lock ~~mode~~ form is responsive to a system-wide measure of read acquisitions and a system-wide measure of read-hold duration.

30. (Currently Amended) The article of claim 24, wherein the lock ~~mode~~ form is an exclusive lock ~~mode~~ and wherein said ~~lock mode manager~~ means in the medium for selecting a lock form is responsive to a system-wide measure of read-hold duration.

31. (Original) The article of claim 24, wherein at least some of said second system-wide measures are selected from a group consisting of: a digital filter, a weighted average, a sliding window average, a finite impulse response, and a central data structure.